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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,947	03/11/2004	Naohiro Matsushita	8375-000017/CO	7728

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EXAMINER	
WEST, LEWIS G	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/798,947	MATSUSHITA, NAOHIRO	
	Examiner	Art Unit	
	Lewis G. West	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6 papers*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by FUJI et al (*Indoor Multi Base Station System with Simultaneous Transmission using OFDM Array Antenna*, as identified in the IDS of October 24, 2004).

Regarding claim 1, Fuji discloses a wireless communication system comprising: a transmission path arranged in an indoor space to function as an antenna; a wireless terminal unit arranged in the indoor space; and a wireless base station unit making wireless communication with the wireless terminal unit through the transmission path, wherein the wireless communication between the wireless terminal unit and the wireless base station unit is made in orthogonal frequency division multiplex modulation. (page 1242, part III A and B)

Regarding claim 7, Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is arranged such that when a plurality of incoming waves are received by the wireless terminal unit, a time difference of the plurality of incoming waves occupying a main power, of the plurality of incoming waves, is in a guard section of the orthogonal frequency division multiplex modulation scheme. (page 1242, part III-B-a)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey (US 4,866,732) in view of FUJI et al (*Indoor Multi Base Station System with Simultaneous Transmission using OFDM Array Antenna*, as identified in the IDS of October 24, 2004).

Regarding claim 1, Carey discloses a wireless communication system comprising: a transmission path arranged in an indoor space to function as an antenna; a wireless terminal unit arranged in the indoor space; and a wireless base station unit making wireless communication with the wireless terminal unit through the transmission path, wherein the wireless communication between the wireless terminal unit, but does not expressly disclose OFDM Fuji discloses a wireless communication system comprising: a transmission path arranged in an indoor space to function as an antenna; a wireless terminal unit arranged in the indoor space; and a wireless base station unit making wireless communication with the wireless terminal unit through the transmission path, wherein the wireless communication between the wireless terminal unit and the wireless base station unit is made in orthogonal frequency division multiplex modulation. (page 1242, part III A and B) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use OFDM in the system of Carey in order to increase diversity gain. (See Fuji- Abstract)

Regarding claim 2, the combination of Carey and Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is composed of a leaky transmission path. (Carey Col. 5 lines 47-68)

Regarding claim 3, the combination of Carey and Fuji discloses the wireless communication system according to claim 2, wherein the leaky transmission path is arranged to meander or arranged zigzag or spirally as a single transmission path in the indoor space, one end of the leaky transmission path is connected to the wireless base station unit, and the other end thereof is connected to a terminal load. (Carey-Figure 1A)

Regarding claim 4, the combination of Carey and Fuji discloses the combination of Carey and Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is composed of an antenna array cable. (Carey-Figure 1A; col. 5 lines 47-68)

Regarding claim 5, the combination of Carey and Fuji discloses the wireless communication system according to claim 4, wherein the antenna array cable comprises a single high frequency transmission path, a plurality of high frequency couplers and antennas provided in a middle of the high frequency transmission path, the antenna array cable is arranged to meander or arranged zigzag or spirally in the indoor space, and one end of the antenna array cable is connected to the wireless base station unit. (Carey-Figure 1A; col. 5 lines 47-68)

Regarding claim 6, the combination of Carey and Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is composed of a plurality of transmission paths arranged in parallel to be spaced from each other with a predetermined interval in the indoor space, one end of each of the plurality of transmission paths

is connected to a power distributor-synthesizer, and the power distributor-synthesizer is connected to the wireless base station unit. (Carey-Figure 1A; col. 5 lines 47-68)

Regarding claim 7, the combination of Carey and Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is arranged such that when a plurality of incoming waves are received by the wireless terminal unit, a time difference of the plurality of incoming waves occupying a main power, of the plurality of incoming waves, is in a guard section of the orthogonal frequency division multiplex modulation scheme. (Fuji-page 1242, part III-B-a)

Regarding claim 8, the combination of Carey and Fuji discloses the wireless communication system according to claim 1, wherein the transmission path is arranged to cross front and rear parts of a plurality of showcases arranged in a room. (Carey-Figure 1A; col. 5 lines 47-68: the transmission path meanders and covers all parts of the room, placing showcases in the room would be intended use and not affect the function or structure of the system)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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